

REMARKS

Claims 1-2 and 5-27 are pending in the application. Claim 8 has been amended herein. Favorable reconsideration of the application, as amended, is respectfully requested.

I. REJECTION OF CLAIMS 8 UNDER 35 USC §112, 2nd ¶

Claim 8 has been rejected under 35 USC §112, second paragraph, as lacking antecedent basis for the limitations “first water” and “second water”.

Applicants have amended claim 8 to recite “a first water” and “a second water” as recommended by the Examiner. Accordingly, Applicants respectfully request withdrawal of the rejection under 35 USC §112, second paragraph.

II. REJECTION OF CLAIMS 2-4, 6-8 AND 11-27 UNDER 35 USC §103(a)

Claims 1, 2, 6-8 and 11-27 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Pastryk et al. in view of Tejada (US 3,869,382). The Examiner contends that although Pastryk fails to teach an ion exchange material used within a washing machine, it would have been obvious to use the silver ion and electrode feature of Tejada in the invention of Pastryk since it is known to use water softeners in household appliances. With regard to the relative positions of the outflow ports, the Examiner contends that it would have been obvious based on Tejada to have the outlet formed at a position downhill and lower than that of the electrode to facilitate outlet flow. The Examiner further contends that it would have been obvious to duplicate outlets such that there exists a second outflow located in a position higher than the electrode to ensure that the electrode is fully submerged in fluid and thus, optimally utilizes the electrode. The Examiner has characterized the relative positions of the outflow ports as a “mere duplication of parts”.

Applicants respectfully disagree with the Examiner’s contentions. As recited in claim 1, the water feeding apparatus of claim 1 recites a first outflow port located in a position lower than the lower end of an electrode and a second outflow port located in a position higher than the higher end of the electrode. Neither Pastryk et al. nor Tejada teach or disclose this feature, which is new and provides unexpected results.

Specifically, with the provision of the second outflow port located higher than the electrode, it is possible to purge air from inside the ion eluter so that water can be introduced into the ion eluter in such a way as to completely envelop the electrode. Because the electrode is completely enveloped, the entire electrode can be used to efficiently elute ions therefrom. Moreover, with the provision of the first outflow port located lower than the electrode, it is possible to drain the water that remains inside the ion eluter. Thus it is possible to prevent short circuiting between electrodes resulting from the metal ion contained in the remaining water precipitating as metal or salts on the electrodes. (See paragraphs [0149] to [0156], and outflow ports 112a and 112b in FIG. 8).

Furthermore, Tejada discloses a water softening apparatus that includes an ion exchanging material and electrodes 28 and 30 for detecting exhaustion of the ion exchanging material. Tejada also discloses silver as a suitable material for the electrodes 28 and 30 (column 6, lines 54-68). However, Tejada does not teach elution from a silver electrode. Rather, Tejada discloses that the silver electrode is for passing electric current across an ion exchange resin for the purpose of detecting the exhaustion of (the time to regenerate) the ion exchange resin. See Fig. 1a; column 9, lines 13-59; column 6, lines 4-8; and the Abstract of Tejada. Based on what Tejada actually teaches, Applicants respectfully submit that it is unreasonable to interpret Tejada's silver electrode as one for eluting silver ions.

Accordingly, the combination of the teachings of Tejada with those of Pastryk would not result in the claimed apparatus and washer of claims 1, 2, 6-8 and 11-27. Furthermore, the Examiner has provided no reasonable basis for modifying the combined teachings of Pastryk and Tejada to arrive at the claimed water feeding apparatus. Applicants respectfully request withdrawal of the rejection of claims 1, 2, 6-8 and 11-27 under 35 U.S.C. §103(a).

Claim 5 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Pastryk et al. and Tejada and further in view of Obata et al. (US 5,029,458). The Examiner acknowledges that Pastryk et al. and Tejada fail to teach the claimed

shower emitted having a vibrator that atomizes by vibration the water fed thereto, but contends it would have been obvious to combine the water spraying feature of the drying operation of Obata with Pastryk and Tejeda since it is a known and beneficial way of supplying fluid, resulting in even distribution and mixing.

Applicants respectfully disagree with the Examiner's contention. As discussed above, Pastryk et al. and Tejeda fail to disclose or suggest an ion eluter that elutes an antimicrobial and/or antifungal ion as the treatment substance and adds the ion to the water passing therethrough. Furthermore, Pastryk et al. and Tejeda fail to disclose or suggest a water feeding apparatus having a first outflow port located in a position lower than the lower end of an electrode and a second outflow port located in a position higher than the higher end of the electrode. The incorporation of the two outflow ports in their respective positions enables the evacuation of air from the ion eluter while preventing the short-circuiting of electrodes ascribable to the metallic ion contained in the water remaining in the ion eluter. Even if one skilled in the art were to properly combine the teachings of Obata with those of Pastryk et al. and Tejeda, the result would not be the water feeding apparatus of claim 5. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 5 under 35 U.S.C. §103(a).

Claims 9 and 10 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Pastryk in view of Tejeda and Obata. The Examiner contends that although Pastryk and Tejeda fail to teach a washing machine having drying functions, combination washer-dryers are well known, and thus it would have been obvious to have the washer-dryer feature of Obata added to Pastryk-Tejeda.

Applicants respectfully disagree with the Examiner's contention. As discussed above with regard to Pastryk and Tejeda, even if one skilled in the art were to properly combine of the teachings of Tejeda with those of Pastryk, the resulting apparatus would not include an ion eluter that elutes an antimicrobial and/or antifungal ion as the treatment substance and that adds the ion to the water passing therethrough. Furthermore, Pastryk et al. and Tejeda fail to disclose or suggest a

water feeding apparatus having a first outflow port located in a position lower than the lower end of an electrode and a second outflow port located in a position higher than the higher end of the electrode. The incorporation of the two outflow ports in their respective positions enables the evacuation of air from the ion eluter while preventing the short-circuiting of electrodes ascribable to the metallic ion contained in the water remaining in the ion eluter. Adding the washer-dryer feature of Obata to the combined teachings of Pastryk et al. and Tejeda would not result in the washer of claims 9 and 10. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 9 and 10 under 35 U.S.C. §103(a).

III. CONCLUSION

Accordingly, all claims 1-2 and 5-27 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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